5

10

15

ABSTRACT

A tuner includes an input terminal operable to receive a high-frequency signal including a first high-frequency signal and a second high-frequency signal. The second high-frequency signal has a level larger than that of the first signal. The tuner further includes a first filter having an input port coupled to the input terminal for allowing a signal having the first frequency to pass therethrough and for attenuating a signal having the second frequency, a high-frequency amplifier coupled to an output port of the first filter, a second filter having an input port coupled to an output of the high-frequency amplifier for allowing a signal having the first frequency to pass therethrough and for attenuating the signal having the second frequency, a local oscillator, and a mixer for mixing the output of the high-frequency amplifier with an output of the local oscillator. This tuner has a high receiving sensitivity even when the tuner receives a high-power interference signal near a receiving range thereof and in a weak electric field.